UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Offic
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/162,821	09/29/98	ERICSON R	4167-11

PM82/0612

RANDY G. HENLEY
OTIS ELEVATOR COMPANY
PATENT DEPARTMENT
TEN FARM SPRINGS
FARMINGTON, CT 06032

EXAMINER	
MCALLISTER,S	
ART UNIT	**PAPER NUMBER**
3652	9

DATE MAILED: 06/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/162,821	Applicant(s) Ericson
	Examiner Steven B. McAllister	Group Art Unit 3652

☐ Responsive to communication(s) filed on _____ .

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *2-14 and 16-28* is/are pending in the application.

Of the above, claim(s) *8-12 and 22-26* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *2-6, 13, 14, 16-20, 27, and 28* is/are rejected.

☒ Claim(s) *7 and 21* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Election/Restriction

1. This application contains claims directed to the following patentably distinct species of the claimed invention: the tensioner as drawn in Fig. 1 using single loop configuration, the tensioner as drawn in Fig. 2 using a single loop configuration, the tensioner as drawn in Fig. 1 using double loop configuration, the tensioner as drawn in Fig. 2 using a double loop configuration.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 2, 6, 16, and 20 are generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Randy G. Henley on 6/6/2000 a provisional election was made without traverse to prosecute the invention of Fig. 1 in the single loop configuration, claims 5, 7, 19, and 21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-12 and 22-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 5, 6, 16, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale, Sr. (1,132,769) in view of Tokyo Rope Mfg (JP 74020811).

Gale discloses a hoistway, elevator car C, counterweight 4, and drive motor at the base M, such the motor is coupled to the car and counterweight via a flat drive rope 11. Gale also discloses a suspension rope 3. Gale does not disclose that the suspension rope is a flat rope. The

'811 reference discloses the use of a flat rope for suspension (see English abstract). It would have been obvious to one of ordinary skill in the art to modify the suspension rope of Gale by making it a flat rope as taught by '811 in order to make it more flexible and corrosion resistant.

As to claims 5, and 19, Gale discloses that the rope has a first end coupled to a counterweight (see Fig. 7), that the rope extends down from the first end, loops around the drive sheave 16, loops around a deflector sheave 18 and extends upward to the elevator where the second end terminates.

As to claims 6 and 20, it is noted that Gale discloses a tensioning mechanism comprising weight 12 and sheave 27.

5. Claims 3, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of the '811 patent as applied to claims 2 and 16 above, and further in view of Murtaugh (12,640).

Gale in view of '811 discloses all elements of the claim except a suspension rope coupled at its first and second ends to the upper portion of the hoistway. Murtaugh discloses such a configuration (see Fig. 1). It would have been obvious to one of ordinary skill in the art to further modify the elevator of Gale by using the suspension rope configuration of Murtaugh in order to effectively alter the length of the suspension rope in order to ensure the proper length.

As to claim 18, it is noted that Murtaugh discloses car sheaves f coupled to the car, the suspension rope having its first and second ends coupled to the upper portion of the hoistway (see Fig. 1) and engaging the sheaves.

6. Claims 13 , 14, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Tokyo Rope Mfg (JP 74020811) as applied to claims 2 and 16 above, and further in view of Aulanko et al (WO 98/29326).

Gale in view of '811 discloses all elements of the claim except use of the ropes are made of non-metallic man-made fibers, or urethane. Aulanko et al disclose the use of these materials (page 2, lines 25-30). It would have been obvious to one of ordinary skill in the art to further modify the apparatus of Gale by using the materials taught by Aulanko et al in order to facilitate the use of smaller sheaves and to eliminate the possibility of corrosion of ropes.

7. Claims 2-4, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murtaugh (12,640) in view of Gale (1,132,769) and Tokyo Rope Mfg (JP 74020811).

Murtaugh discloses a hoistway, an elevator car A, a suspension rope D coupled to the elevator car and counterweight B, and a drive rope C for moving the car along the suspension rope. Murtaugh does not show a drive motor with a drive sheave in the bottom portion of the hoistway engaging the drive rope or that the ropes are flat. Gale shows a drive sheave 16 with a drive motor M at the bottom of the hoistway engaging flat drive rope 11 (see Fig. 1). It would have been obvious to one of ordinary skill in the art to modify the drive system of Murtaugh by

using the drive configuration of Gale to provide for less manual labor in raising and lowering the elevator. The '811 reference discloses the use of a flat rope for suspension (see English abstract). It would have been obvious to one of ordinary skill in the art to modify the suspension rope of Murtaugh by making it a flat rope as taught by '811 in order to make it more flexible and corrosion resistant.

As to claim 4, Murtaugh in view of Gale and '811 discloses an elevator sheave f, a deflector sheave coupled within the upper portion of the hoistway (g of Murtaugh), a counterweight sheave (g' of Murtaugh), and a suspension rope having its first and second ends coupled to the upper portion of the hoistway (see Fig. 1 of Murtaugh), the rope descending and looping the car sheave, extending up and looping the deflector sheave and going down and looping around the counterweight sheave and rising to its second end. Murtaugh in view of Gale and '811 does not show the elevator sheave on the bottom of the car, however it is well known in the art to put the elevator sheave on the bottom of the car. It would have been obvious to one of ordinary skill in the art to do so in order to reduce the amount of space required above the elevator car at the top of the shaft.

Allowable Subject Matter

8. Claims 7 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.

6/08/00

ROBERT P. OLSZEWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Steven B. McAllister

June 7, 2000